Schools could be supportive environments for improving dietary behaviors of children and adolescents by promoting healthy eating. Obesity and chronic diseases including cardiovascular diseases, cancer and stroke which are the three leading causes of mortality among adults over age 18, could be prevented by healthy eating and regular physical activity (CDC, 2011). Promoting healthy eating behaviors from childhood is an effective adaptive strategy that could lead an individual towards healthy eating trajectories throughout lifetime. CDC has created a set of guidelines to address coordination of school policies and practices, supportive environments and school nutritional programs that promote healthy eating at schools (CDC, 2011). USDA’s Smart Snacks in school nutrition guideline which went into effect for the 2014-2015 school year states that all foods sold at in the school’s store should comply with nutrition standards. Among the resources that help in identification of foods that meet Smart Snacks criteria are MyPlate materials that are developed specifically for kids (Kindergarten, Preschool, Grades 1-6) and their parents or caregivers by Team Nutrition (“MyPlate | Food and Nutrition Service”, 2016). MyPlate materials are evidence-based lessons and activities, posters, handouts, books, games and songs that encourage including choices from all the Myplate food groups when preparing meals and snacks. This effort toward redesigning lunch trays of preschoolers aims at promoting healthier trajectories via application of research concerning the impact of microenvironmental cues (shape, size, and visual aspects of lunch trays) on food preference.

With regard to the lunch tray design, the goal is to provide children at early care and education centers with appropriate nutrients that guidelines such as Choose MyPlate from USDA recommend. According to Zampollo, Kniffin, Wansink, and Shimizu (2012) children are tempted by plates with seven different food items and in six different colors. By offering modular graphic components that fit together to create the lunch tray, children will be given control in creating their desired lunch composition. The tray would not be complete if an essential ingredient form five essential groups - fruits, vegetable, grains, protein foods group and dairy – is missing.

References: